

**EAST Search History****EAST Search History (Prior Art)**

| Ref # | Hits | Search Query                                    | DBs                    | Default Operator | Plurals | Time Stamp       |
|-------|------|---|------------------------|------------------|---------|------------------|
| S1    | 1    | ("20060051939").PN.                             | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2007/06/20 09:10 |
| S2    | 1    | S1 and plane                                    | US-PGPUB; USPAT; USOCR | OR               | ON      | 2007/06/20 09:38 |
| S3    | 1710 | (257/64,E33.025, E33.028,E33.03, E33.033).CCLS. | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2007/06/21 08:29 |
| S4    | 722  | S3 and mask                                     | US-PGPUB; USPAT; USOCR | OR               | ON      | 2007/06/20 09:39 |
| S5    | 34   | S3 and (mask with polycrystalline)              | US-PGPUB; USPAT; USOCR | OR               | ON      | 2007/06/20 14:41 |
| S8    | 1    | JP-2001102307-.did.                             | DERWENT                | OR               | ON      | 2007/06/20 10:09 |
| S9    | 1    | JP-2001320120-.did.                             | DERWENT                | OR               | ON      | 2007/06/20 14:36 |
| S13   | 254  | akitaka.in.                                     | US-PGPUB; USPAT; USOCR | OR               | ON      | 2007/06/20 10:18 |
| S14   | 26   | S13 and nitride                                 | US-PGPUB; USPAT; USOCR | OR               | ON      | 2007/06/20 10:18 |
| S15   | 1    | JP-2000058461-.did.                             | DERWENT                | OR               | ON      | 2007/06/20 14:37 |
| S16   | 1    | JP-2002009004-.did.                             | DERWENT                | OR               | ON      | 2007/06/20 14:40 |
| S17   | 1    | JP-2000058981-.did.                             | DERWENT                | OR               | ON      | 2007/06/20 14:40 |
| S18   | 1712 | (257/64,E33.025, E33.028,E33.03, E33.033).CCLS. | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2007/06/21 08:29 |
| S19   | 1319 | S18 and GaN                                     | US-PGPUB; USPAT; USOCR | OR               | ON      | 2007/06/21 08:29 |
| S20   | 668  | S18 and (GaN with growth)                       | US-PGPUB; USPAT; USOCR | OR               | ON      | 2007/06/21 08:30 |
| S21   | 80   | S18 and (GaN with growth with mask)             | US-PGPUB; USPAT; USOCR | OR               | ON      | 2007/06/21 10:37 |
| S22   | 1    | ("6225650").PN.                                 | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2007/06/21 10:24 |
| S23   | 1    | S22 and (dislocation adj density)               | US-PGPUB; USPAT; USOCR | OR               | ON      | 2007/06/21 10:32 |

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| S24 | 1   | S22 and (AlGaN or GaAIN or AlIN)   | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/21 10:35 |
| S25 | 45  | S18 and ((AlGaN or GaAIN or AlIN) with mask)                             | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/21 12:50 |
| S26 | 95  | biwa.in.   | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/21 11:03 |
| S27 | 78  | S26 and GaN  | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/21 11:03 |
| S28 | 72  | S26 and GaN and (AlGaN or GaAIN or AlIN)                                 | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/21 11:03 |
| S29 | 68  | S26 and GaN and (AlGaN or GaAIN or AlIN) and mask                        | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/21 12:47 |
| S30 | 1   | S26 and ((AlGaN or GaAIN or AlIN) with mask)                             | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/21 11:05 |
| S31 | 1   | S26 and GaN and ((AlGaN or GaAIN or AlIN) with mask)                     | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/21 12:49 |
| S32 | 290 | GaN and ((AlGaN or GaAIN or AlIN) with mask) not S25                     | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/21 12:51 |
| S33 | 290 | S32 not S26  | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/21 12:51 |
| S34 | 88  | S32 and (polycrystal or polycrystalline)                                 | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/21 13:10 |
| S35 | 1   | ("7087114").PN.  | US-PGPUB; USPAT; USOCR | OR | OFF | 2007/06/21 13:11 |
| S36 | 1   | ("20030145783").PN.  | US-PGPUB; USPAT; USOCR | OR | OFF | 2007/06/21 13:11 |
| S37 | 1   | ("20030145783").PN.  | US-PGPUB; USPAT; USOCR | OR | OFF | 2007/06/21 16:13 |
| S38 | 1   | S37 and substrate  | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/21 16:16 |
| S39 | 1   | S37 and (S32 and undersubstrate)   | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/21 16:17 |
| S40 | 7   | GaN and (void with (AlGaN or GaAIN or AlIN) with mask)                   | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/22 10:12 |
| S41 | 2   | (polycrystal or polycrystalline) with (AlGaN or GaAIN or AlIN) with void | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/22 10:13 |

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| S42 | 8   | (polycrystal or polycrystalline) with (AlGaN or GaAIN or AlN) with (cavity or defect)    | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/22 10:18 |
| S43 | 1   | ("20030145783").PN.  | US-PGPUB; USPAT; USOCR | OR | OFF | 2007/06/22 10:18 |
| S44 | 1   | S43 and (voluminous adj defect)  | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/22 10:24 |
| S45 | 1   | S43 and ((voluminous adj defect) near5 mask)   | US-PGPUB; USPAT; USOCR | OR | ON  | 2007/06/22 10:24 |
| S46 | 201 | (GaN or gallium adj nitride) and (poly\$crystal \$4 with mask)                           | US-PGPUB; USPAT; USOCR | OR | ON  | 2008/04/25 21:35 |
| S47 | 180 | S46 and (@ad < "20050603" or @rlad < "20050603")   | US-PGPUB; USPAT; USOCR | OR | ON  | 2008/04/25 21:35 |
| S48 | 98  | S46 and @ad < "20030829"   | US-PGPUB; USPAT; USOCR | OR | ON  | 2008/04/25 21:36 |
| S49 | 1   | ("6225650").PN.  | US-PGPUB; USPAT; USOCR | OR | OFF | 2008/10/14 10:41 |
| S50 | 1   | S49 and (GaN or gallium adj nitride) with substrate                                      | US-PGPUB; USPAT; USOCR | OR | ON  | 2008/10/14 10:41 |
| S51 | 1   | ("20030145783").PN.  | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/03/30 15:06 |
| S52 | 1   | S51 and undersubstrate with (GaN or gallium adj nitride)                                 | US-PGPUB; USPAT; USOCR | OR | ON  | 2009/03/30 15:06 |
| S53 | 3   | ("6713845") or ("6670204") or ("6562644")).PN.   | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/03/30 15:29 |
| S54 | 3   | S53 and mask   | US-PGPUB; USPAT; USOCR | OR | ON  | 2009/03/30 15:29 |
| S55 | 1   | ("6844246").PN.  | US-PGPUB; USPAT; USOCR | OR | OFF | 2009/03/30 15:32 |
| S56 | 1   | S55 and polycrystalline  | US-PGPUB; USPAT; USOCR | OR | ON  | 2009/03/30 15:33 |
| S57 | 1   | ("6844246").PN.  | US-PGPUB; USPAT; USOCR | OR | OFF | 2010/01/28 09:15 |
| S58 | 1   | S57 and first with second with mask  | US-PGPUB; USPAT; USOCR | OR | ON  | 2010/01/28 09:17 |
| S59 | 75  | motoki.in. and (GaN or gallium adj nitride) and (@rlad < "20040830" or @ad < "20040830") | US-PGPUB; USPAT; USOCR | OR | ON  | 2010/01/28 09:18 |
| S60 | 68  | S59 and mask   | US-PGPUB; USPAT; USOCR | OR | ON  | 2010/01/28 09:19 |

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| S61 | 23  | (kimura with akitaka).in.   | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2010/01/28<br>09:44 |
| S62 | 22  | S61 and (@rlad < "20040830" or @ad < "20040830")  | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2010/01/28<br>09:44 |
| S63 | 10  | ("5081519"   "5727008").<br>PN. OR ("6100106").<br>URPN.  | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2010/01/28<br>09:53 |
| S64 | 8   | S63 and (@rlad < "20040830" or @ad < "20040830")  | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2010/01/28<br>09:54 |
| S65 | 34  | ("5880485"   "6051849").<br>PN. OR ("6320209").<br>URPN.  | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2010/01/28<br>10:17 |
| S66 | 30  | S65 and (@rlad < "20040830" or @ad < "20040830")  | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2010/01/28<br>10:17 |
| S67 | 65  | ("4077817"   "5122845"<br>  "5218216"   "5741360"<br>  "5795798").PN. OR<br>("5880485").URPN.   | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2010/01/28<br>10:43 |
| S68 | 64  | S67 and (@rlad < "20040830" or @ad < "20040830")  | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2010/01/28<br>10:44 |
| S69 | 1   | mask with (poly-crystal<br>\$4 or poly adj crystal\$4)<br>with (AlN or AlGaN or<br>aluminum adj nitride or<br>aluminum adj gallium adj<br>nitride) and (@rlad <<br>"20040830" or @ad <<br>"20040830") | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2010/01/28<br>11:03 |
| S70 | 160 | mask with (poly-crystal<br>\$4 or poly adj crystal\$4)<br>and (@rlad <<br>"20040830" or @ad <<br>"20040830")  | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2010/01/28<br>11:05 |
| S71 | 5   | mask with (poly-crystal<br>\$4 or poly adj crystal\$4)<br>and (GaN or gallium adj<br>nitride) and (@rlad <<br>"20040830" or @ad <<br>"20040830")  | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2010/01/28<br>11:06 |

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| S72 | 12 | mask and (poly-crystal\$4 or poly adj crystal\$4) with (AlN or AlGaN or aluminum adj nitride or aluminum adj gallium adj nitride) and (@rlad < "20040830" or @ad < "20040830")   | US-PGPUB; USPAT; USOCR | OR | ON  | 2010/01/28 11:08 |
| S73 | 1  | ("20060051939").PN.  | US-PGPUB; USPAT; USOCR | OR | OFF | 2010/01/28 14:44 |
| S74 | 35 | ("20010010372"   "20010026658"   "4317085"   "4633477"   "4840922"   "4855256"   "5523256"   "5625637"   "5739554"   "5972730"   "6046465"   "6153010"   "6252261"   "6252894"   "6377596"   "6448102").PN. OR ("6720586").URPN. | US-PGPUB; USPAT; USOCR | OR | ON  | 2010/06/10 09:03 |
| S75 | 9  | S74 and (polycrystal\$4 or poly adj crystal\$4)  | US-PGPUB; USPAT; USOCR | OR | ON  | 2010/06/10 09:04 |
| S76 | 5  | ("5880485").PN. OR ("6240115").URPN.   | US-PGPUB; USPAT; USOCR | OR | ON  | 2010/06/10 09:05 |
| S77 | 1  | S76 and (polycrystal\$4 or poly adj crystal\$4)  | US-PGPUB; USPAT; USOCR | OR | ON  | 2010/06/10 09:05 |

### EAST Search History (Interference)

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**6/ 10/ 2010 9:06:17 AM**

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